

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

Math

# Integer Rules

## Review

## Packet

Complete all ODD  
problems. May  
do evens if want  
more practice 😊

Assigned: \_\_\_\_\_

Due: \_\_\_\_\_

Quest: \_\_\_\_\_

**Reteaching 1-5****Adding Integers****Use tiles and the rules for adding integers to find each sum.**

a.  $-4 + -3$

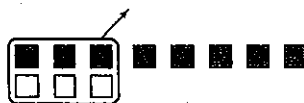


Four negative tiles plus 3 negative tiles gives 7 negative tiles.

$-4 + -3 = -7$

The sum of two negative integers is negative.

b.  $-8 + 3$

Remove zero  
pairs

Since the signs of the integers are different, you must remove zero pairs.

The number of tiles left is the number of negative tiles  $|-8|$  minus the number of positive tiles  $|3|$ . Thus, you can always subtract the absolute values of the numbers to find how many tiles will be left.

$|-8| - |3| = 5$

Since there are more negative tiles than positive tiles,  $|-8| > |3|$ , there are negative tiles left after you subtract zero pairs. Thus, the sum is negative.

$-8 + 3 = -5$

**Use rules or tiles to find each sum.**

1.  $9 + (-12)$

\_\_\_\_\_

2.  $-4 + 10$

\_\_\_\_\_

3.  $-1 + (-8)$

\_\_\_\_\_

4.  $-6 + (-11)$

\_\_\_\_\_

5.  $-5 + 15$

\_\_\_\_\_

6.  $2 + (-14)$

\_\_\_\_\_

7.  $(-3) - 6$

\_\_\_\_\_

8.  $-(-2) + 9$

\_\_\_\_\_

9.  $(-2) - 4$

\_\_\_\_\_

10.  $-5 - (-4)$

\_\_\_\_\_

11.  $7 + (-2)$

\_\_\_\_\_

12.  $16 + (-6)$

\_\_\_\_\_

**Reteaching 1-6****Subtracting Integers**

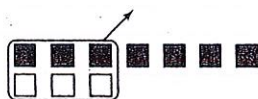
- a. Find
- $-7 - (-3)$
- and
- $-7 + 3$
- . Compare.

$-7 - (-3)$



Start with 7 negative tiles and take away 3 negative tiles.

$-7 + 3$



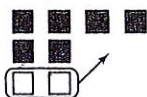
Add three positive tiles.  
Remove zero pairs.

With both you start with 7 negative tiles. Taking away 3 negative tiles has the same effect as adding 3 positive tiles and removing zero pairs.

$-7 - (-3) = -7 + 3 = -4$

- b. Find
- $-4 - 2$
- and
- $-4 + (-2)$
- . Compare.

$-4 - 2$



$-4 + (-2)$



With both you start with 4 negative tiles. Adding two zero pairs and taking away two positive tiles has the same effect as adding two negative tiles.

$-4 - 2 = -4 + (-2) = -6$

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**Use rules for subtracting integers to find each difference. Use tiles to help.**

1.  $-5 - (-3) = -5 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

2.  $-8 - 6 = -8 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3.  $3 - (-9) = 3 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

4.  $-2 - (-7) = -2 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

5.  $4 - 10 = 4 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6.  $1 - (-6) = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

7.  $-9 - 5 = -9 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

8.  $-6 - (-2) = -6 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

9.  $7 - 8 = 7 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

**Reteaching 1-9****Multiplying and Dividing Integers**

Multiplying and dividing integers is very similar to multiplying and dividing whole numbers. Just remember the two basic rules for determining the sign of the product or quotient.

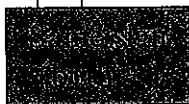
**Rule 1:** The product or quotient of two integers with the *same sign* is positive.

**Rule 2:** The product or quotient of two integers with *opposite signs* is negative.

**Find each product or quotient.**

a.  $5 \cdot 7$

$5 \cdot 7 = 35$



b.  $-2(-3)$

$-2(-3) = 6$



c.  $15 \div 3$

$15 \div 3 = 5$



d.  $-40 \div (-10)$

$-40 \div (-10) = 4$



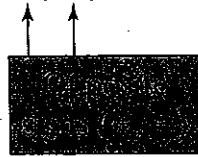
e.  $-5 \cdot 7$

$-5 \cdot 7 = -35$



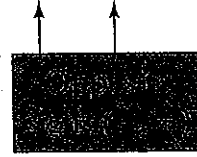
f.  $2(-3)$

$2(-3) = -6$



g.  $-15 \div 3$

$-15 \div 3 = -5$



h.  $40 \div (-10)$

$40 \div (-10) = -4$



*Just facts!*

$-4 \cdot 6 = \underline{\hspace{2cm}}$

$36 \div 9 = \underline{\hspace{2cm}}$

$-4 \cdot (-6) = \underline{\hspace{2cm}}$

$36 \div (-9) = \underline{\hspace{2cm}}$

$4 \cdot (-6) = \underline{\hspace{2cm}}$

$-36 \div (-9) = \underline{\hspace{2cm}}$

$6 \cdot (-4) = \underline{\hspace{2cm}}$

$-36 \div 9 = \underline{\hspace{2cm}}$

Critical Thinking Questions: Complete all.

1. Create three multiplication problems with a product of  $-24$ .

$$\underline{\quad} \cdot \underline{\quad} = -24$$

$$\underline{\quad} \cdot \underline{\quad} \cdot \underline{\quad} = -24$$

$$\underline{\quad} \cdot \underline{\quad} \cdot \underline{\quad} \cdot \underline{\quad} = -24$$

2. Frank claims that  $-20 \div (-4) = -5$ .  
Is he correct / incorrect? why?

3. Order from least to greatest:

$$|-10|, -7, 2, 6$$

hint: solve  $|-10| = \dots$  1st

4.  $-14 - 3 - (-22) = \underline{\hspace{2cm}}$

$$9 - (-2) - 4 = \underline{\hspace{2cm}}$$